

17994 Lm

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Rec 19/3/77

Report (if any) on Hull of Vessel. Port of Hartlepool No. 5704

Description Inverted, Compound, Surface Condensing.  
 Made by Messrs J. Richardson & Sons.  
 When March 1877 At Hartlepool.  
 Diameter of cylinders 29 x 55 Length of stroke 33.  
 No. of revolutions per minute about 65.  
 Point of cut off 1/2 stroke.  
 Diameter of screw shaft 9 1/4.  
 Diameter of crank shaft journals 9 1/4.  
 Diameter of screw, or of paddle wheel 13.3.  
 Pitch of screw 15.6  
 No. of blades, 4 Total surface 52 sq. feet.  
 No. of bilge pumps 2 and sizes 2 1/8 dia x 34 stroke.  
 Do they pump from each compartment Engine room, aft well and fore hold.

Are all the bilge suction pipes fitted with roses yes.  
 No. of feed pumps 2 and sizes 3 1/2 dia x 23 1/2 stroke.  
 What gauges are there attached to the engines and boilers ... 1 on each end of Boiler for steam pressure. 1 vacuum gauge.  
 Description and size of Donkey Pumps ... 2 inverted double acting 7 1/2 dia x 9 stroke and 3 1/2 dia x 7 stroke. Large one from Sea Tanks and bilges of engine room. Small one from fore hold.  
 No. of bilge injections one and sizes 4 1/2 inches  
 Are they connected to air, or circulating pumps to circulating.  
 Is there a hand pump in the engine room yes.  
 Can it be worked by the main engines no.  
 Is there a deck hose of sufficient length to reach to any part of the vessel yes.

### MAIN BOILERS.

Number one Description Cylindrical, Multitubular and fired from each end.  
 Made by Messrs J. Richardson & Sons.  
 When March 1877 At Hartlepool.  
 Working pressure 65 lbs per sq. inch.  
 Tested by hydraulic pressure to 130 lbs, Date Dec 13/76  
I was present n.a.  
 Description of super-heating apparatus none.  
 Can each boiler be worked separately only one boiler.

Can the super-heater be shut off and the boilers worked separately }  
 Description and area of safety valves on each boiler ... 2 spring safety valves 4 3/4 dia = 35.4 sq. ins. Area.  
 No. of square feet of fire-grate surface in each boiler } 59.  
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin } yes.  
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. } Yes (except bilge suction in fore hold when cargo is in)

### DONKEY BOILER.

Description Upright Cyl with 2 Cross tubes.  
 Where fixed in the stokehold.  
 Working pressure 53 lbs.

Tested by hydraulic pressure to 130 lbs, Date Jan 30/77  
 Description and area of safety valves 1 loaded direct 2 1/4 2 1/2 ins. 1 lever & weight 2 1/4 7.9 area.  
 No. of square feet of fire grate 11.

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship } yes.  
 Are they Kingston valves or common cocks ... } stop valves & cocks.  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... } yes.  
 Are the discharge pipes above or below the deep water line } at the deep load line.  
 Are they each fitted with a discharge valve on the plating of the vessel } yes.

What pipes are carried through the bunkers none.  
 How are they protected }  
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock } new.  
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge } yes.  
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead } sluice door fitted. Tunnel open to the gutter ways of aft tank.

J. Richardson & Sons  
of Chester

Manufacturer. Except of the Donkey boiler

I was present when steam was raised and the engines worked. Steam 65 lbs vacuum 27 ins Revols 73. all satisfactory. Feb 10<sup>th</sup> 1877 n.a.

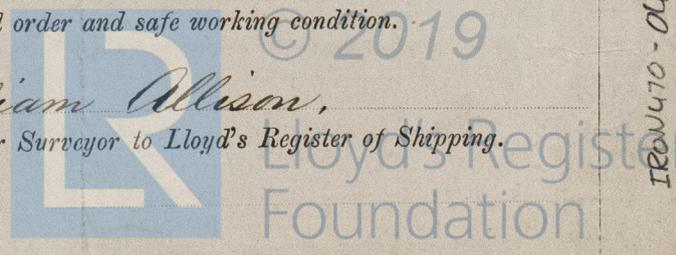
I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood)

Screw (or Paddle) Steam Vessel "Thesilla" owned by Lawson & Greenwell  
 of the Port of London of 794 67/100 Tons Register, and 120 Registered Horse Power,  
 and that they have been carefully inspected and examined by me at Hartlepool.  
 and found to be at this date, viz., March 9<sup>th</sup> 1877 in good order and safe working condition.

Amount of Fee for Survey £ 6 : 0 :  
 (Travelling Expenses, if any, £ 2.5) £ 8.5

William Allison,  
 Engineer Surveyor to Lloyd's Register of Shipping.

*M.C.*  
*J.P.A.*



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